

What is claimed is:

1. An apparatus of reducing transmission noise interference of a scanner, comprising:

a charge coupled device, to convert a detected light intensity into a photocurrent
5 by performing a photoelectric conversion, to store the photocurrent in an electrode as a signal charge, and to output an analog signal after converting the signal charge into a potential difference;

a shield circuit, coupled to the charge coupled device to filter out an unwanted analog signal and to retain a required analog signal of the charge coupled device; and

10 a charge coupled device cable, coupled to the shield circuit to transmit the required analog signal.

2. The apparatus according to claim 1, wherein the shield circuit coupled to the charge coupled device and the charge coupled device cable comprises:

a multiplexer, coupled to the charge coupled device to output a shield signal;
15 and

an AND gate, coupled to the charge coupled device, the multiplexer and the charge coupled device cable, to filter out the unwanted analog signal using the shield signal, and to retain the required analog signal.

3. The apparatus according to claim 1, wherein the shield signal is an adjustable
20 signal.

4. The apparatus according to claim 1, wherein the required analog signal is retained when the shield signal is at a high level, and the unwanted analog signal is filtered out when the shield signal is at a low level.

5. A method of reducing transmission noise interference for a scanner, comprising using a shield signal to filter away an unwanted analog signal and to retain a required analog signal during a signal transmission process of the scanner.

6. The method according to claim 5, wherein the shield signal includes an
5 adjustable signal.

7. The method according to claim 5, wherein the required analog signal is retained when the shield signal is at a high level, and the unwanted analog signal is filtered out when the shield signal is at a low level.

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